# BURRELL COLLEGE OSTEOPATHIC MEDICINE

Office of Research & Sponsored Programs 2022-2024 Research Strategic plan

Joseph N. Benoit, Ph.D. Assistant Dean for Research Email: research@burrell.edu This document was developed by the Burrell College Office of Research and Sponsored Programs with input from the Burrell College Research Advisory Council. The membership roster of the 2021-2022 Research Advisory Council members is provided on this page. Job titles are reflective of their title at the time of their service on the council.

### 2021-2022 Research Advisory Council Roster

#### Joseph N. Benoit, Ph.D. (Council Chair)

Assistant Dean for Research Professor of Physiology

#### Adrienne Kania, D.O.

Associate Professor of Osteopathic Manipulative Medicine Elected Faculty Representative

#### Pedro del Corral, M.D., Ph.D.

Associate Professor of Pathology Elected Faculty Representative

#### Gabor Szalai, Ph.D.

Associate Professor of Immunology Assistant Dean for Faculty Affairs Elected Faculty Representative

#### Walker Toohey, OMSI

Student Representative

#### Norice Lee, MLIS

Associate Director of Library Associate Professor of Medical Informatics Ex Officio

#### Harald M. Stauss, M.D., Ph.D.

Professor of Pharmacology Director of Student Research Department of Biomedical Sciences Ex Officio

#### Michael E. Woods, Ph.D.

Associate Professor of Pathology Director of Research Laboratories Ex Officio

#### Kalli Martinez, M.S.

Scientific Research Associate Research Laboratories Manager Ex Officio

#### Jennifer E. Taylor

Vice-President for Administration Chief Financial Officer Ex Officio

#### Martha Enriquez

Research Office Administrative Coordinator Council Recording Secretary

# BURRELL COLLEGE OF OSTEOPATHIC MEDICINE MISSION, VISION, GUIDING PRINCIPLES

#### **Burrell College Mission Statement**

Para la gente y el futuro: For the people and the future, the Burrell College of Osteopathic Medicine at New Mexico State University is dedicated to improving the health of the Southwestern United States and its border with Northern Mexico through culturally respectful undergraduate, graduate and continuing osteopathic medical education, research, and its support of clinical service to the community.

The College is focused on increasing diversity in the physician workforce and fostering a practice of life-long learning, compassion, respect and excellence in its students.

#### **Burrell College Vision Statement**

The Burrell College of Osteopathic Medicine will be regionally and nationally recognized for significantly impacting physician workforce needs of the Southwest and access to quality medical services. The College will be a leader in increasing workforce diversity, particularly among Native American and Hispanic populations.

#### **Burrell College Guiding Principles**

- 1. The College will achieve and maintain accreditation for its academic program(s) through appropriate accrediting bodies.
- 2. The College provides an evidence-based osteopathic medical education program that enables students to demonstrate the knowledge and competencies required to enter graduate medical education and the practice of osteopathic medicine.
- 3. The College embraces diversity that fosters inclusiveness and cultural awareness among all learners and educators with the ultimate goal to increase diversity in the regional physician workforce.
- 4. The College prepares students to effectively address the health needs of diverse populations, with emphasis on the southwest border region, particularly among Hispanic and Native American populations.
- 5. The College supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.
- 6. The College supports the establishment of a healthcare culture that promotes osteopathic principles of wellness and prevention.
- 7. The College develops new graduate medical education (GME) opportunities with special emphasis on primary care and physician retention in the region.

# Burrell College Office of Research & Sponsored Programs Office Mission, Function, and Organizational Structure

#### **Research Office Mission**

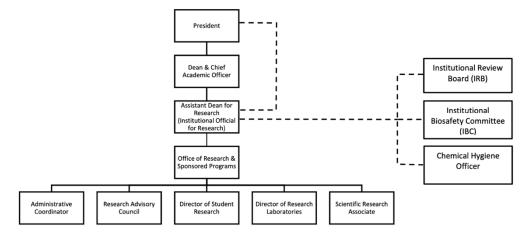
The Burrell College of Osteopathic Medicine Office of Research & Sponsored Programs is committed to supporting faculty and students in their efforts to advance knowledge by, creating an atmosphere of inquiry and discovery that inspires excellence in creative scholarship and medical practice.

#### **Research Office Function**

The Office of Research and Sponsored Programs (ORSP) provides organization and infrastructure in support of faculty, staff, and student research acrivitites. ORSP asures that regulatory compliance issues are effectively addressed in ways that facilitate innovation, collaboration, and involvement among Burrell College of Osteopathic Medicine researchers and through collaboration with other research entities.

#### ORGANIZATIONAL STRUCTURE FOR RESEARCH

The President has designated Institutional Official (I.O.) for Research Responsibilities to the Assistant Dean for Research. The I.O. has oversight responsibility and signatory authority to ensure compliance in all research functions of the College. The Dean of the College is the Chief Academic Officer appointed by the President and appoints the Assistant Dean for Research. The Assistant Dean for Research provides oversight of the Office of Research and Sponsored Programs (ORSP). The Research Advisory Council includes elected members from the faculty and serves in an advisory capacity to the Assistant Dean for Research. Two Directors are appointed from the faculty by the Assistant Dean for Research. The Director of Student Research is responsible for providing oversight of various student research activities including the Summer Research Experience and Medical Student Research Day. The Director of Research Laboratories provides oversight of the operational aspects of the Burrell Research Laboratories. A Scientific Research Associate manages the Research Laboratories and also serves as the Chemical Hygiene Officer. Two compliance committees provide institutional level oversight in accordance with federal regulations and guidelines. The Institutional Review Board (IRB) is an institutional level board responsible for oversight of research involving human subjects and is appointed by the Institutional Official. The Institutional Biosafety Committee (IBC) is an institutional level committee responsible for oversight of research involving recombinant DNA and biohazardous agents. The I.O. for Research assures that the IRB and IBC are appropriately resourced and empowered.



#### DEVELOPMENT OF THE RESEARCH STRATEGIC PLAN

Research and scholarly activity are of paramount importance in the academic realm of biomedical, clinical, and educational disciplines. The 2022-2024 Research Strategic Plan is the third Burrell College Plan with previous plans published in 2017 and 2019. The 2022 – 2024 Research Strategic Plan is designed to be a living document developed by the Assistant Dean for Research with input from the Burrell Research Advisory Council and the Burrell Executive Leadership Team. The 2022-2024 Research Strategic Plan is guided by Strategic Focus Four of the 2021-2024 Burrell College Strategic Plan which appears below:

#### **Strategic Focus Four:**

<u>Guiding Principle:</u> The College supports faculty and students in their efforts to advance knowledge by creating an atmosphere of inquiry and discovery that inspires excellence in scholarship and medical practice.

- o Expand and Sustain Research and Creative Scholarship Opportunities
  - Develop and expand a tiered mentoring environment that promotes the development of faculty researchers throughout the College, including Regional Academic Centers.
  - Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers.
  - Sponsor and facilitate opportunities for students to engage with members of the research community through interest groups, professional affiliations, and scholarly events.
  - Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities.
  - Promote opportunities that facilitate the expansion of extramural research.

#### PURPOSE OF THE RESEARCH STRATEGIC PLAN

The purpose of the Research Strategic Plan is to define strategies that will advance the goals and activities of the 2021-2024 College Strategic Plan. Indicators of success in achieving the goals of the research strategic plan will be demonstrated by but not limited to the institutional budget for research, programs, staffing and infrastructure; research expenditures; faculty productivity; student/trainee research engagement; and success in partnerships with other research institutions.

#### STRENGTHS, CHALLENGES, AND OPPORTUNITIES

The Burrell College of Osteopathic Medicine conducts health related research of particular relevance to the college mission and provides the essential tools for its students to understand the scientific method and design, and to conduct biomedical, behavioral, clinical, educational, and osteopathic medical research. College investments in research have been a major catalyst for the development of faculty driven research programs on the main campus. As part of the strategic planning process areas of strengths, challenges and opportunities were discussed and are presented in the following sections.

#### Strengths

The College research enterprise continues to grow as evidenced by well-equipped research laboratories supporting basic science, human physiology, and osteopathic medicine research; increasing numbers of faculty and students involved in research; increasing number of research presentations and publications at professional conferences; faculty, staff and student recognition by external research entities; collaboration with neighboring colleges, universities

and research organizations; and increased extramural funding for research. The Distinction in Research pathway for students launched in 2021 is on target to award the first Distinction to a member of the class of 2023.

#### **Challenges:**

Faculty time commitments, infrastructure to support research including personnel, and proprietary status are ongoing challenges. Specifically, expanding demands on faculty time are limiting the amount of effort that can be devoted to research and creative scholarship, research office workload is limiting the level of office support that can be provided to researchers in areas of grant support, regulatory compliance, and training. Lack of college level support and expertise in statistics and biostatistics creates a challenge as regulatory and funding agencies are placing requirements for incorporating statistical justification into study and grant proposal design. Library support, while adequate for educational purposes, may not be sufficiently robust to support expanding research programs. Increased numbers of faculty and students engaging in research are beginning to indicate a need for additional research space. The College's proprietary status limits the ability of researchers to apply for certain types of sponsored research support.

#### **Opportunities**

Investments in research by the College have established the research laboratories, funded faculty driven research inititiatives, and created multiple opportunities for students to participate in research projects that are aligned with the College mission as an osteopathic medical school. As a result, the College is staged for the next phase of research growth and development. Opportunities include engaging clinical researchers at the regional academic centers; a focused emphasis of the AOA on increasing NIH funding for osteopathic research; and enthusiasm among Burrell medical students and residents for participating in faculty mentored research projects. Expansion and recent fundraising successes by the Southwest Foundation for Osteopathic Education and Research may also provide opportunities for development in areas related to research.

#### BURRELL COLLEGE PRIORITY AREAS FOR RESEARCH

Strategic Focus Four: Research and Creative Scholarship of The <u>Burrell College 2021-2024 Strategic Plan</u> lists the following five initiatives for research under the heading of "Expand And Sustain Research And Creative Scholarship Opportunities."

- A. Develop and expand a tiered mentoring environment that promotes the development of faculty researchers throughout the College
- B. Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers
- C. Sponsor and facilitate opportunities for students to engage with members of the research community through interest groups, professional affiliations, and scholarly events.
- D. Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities.
- E. Promote opportunities that facilitate the expansion of extramural research.

The Research Advisory Council identified specific strategies to advance each of the initiatives that were listed in the 2021-2022 College Strategic Plan.

# A. Develop and expand a tiered mentoring environment that promotes the development of faculty researchers, student researchers, and office support staff throughout the College, including the regional academic centers.

#### Strategies

- i. Establish a faculty researcher onboarding process in collaboration with faculty affairs.
- ii. Identify the subset of main campus and regional academic center faculty with research interests and projects for students
- iii. Establish a mentoring program whereby experienced College faculty researchers mentor less experienced researchers.
- iv. Identify and provide faculty professional development focuses on topics such as identifying funding opportunities, grant-writing, data presentation, manuscript preparation, and responsible conduct of research.
- v. Develop and provide educational opportunities for faculty interested in participating in externally sponsored clinical trials.
- vi. Provide and incentivize pre-award and post-award grant management professional development opportunities for College employees in offices that support researchers on the main campus and at regional academic centers.
- B. Expand the number of faculty mentored student research opportunities throughout the College including the Regional Academic Centers.

#### Strategies:

- i. Promote faculty involvement in research.
- ii. Increase visibility of the research at regional academic centers through regular visits, seminars, and online communication.
- iii. Encourage collaborative research projects that involve two or more faculty.
- iv. Promote and encourage involvement of main campus and regional academic center faculty in non-clinical research electives and the Distinction in Research Program.
- v. Communicate the benefits of faculty mentored research to students.
- vi. Track and celebrate collaborative research partnerships among faculty.
  - a. Collaborate with faculty affairs to develop a faculty lecture series where faculty are invited to present a lecture on their research and creative scholarship to the campus community.
  - b. Institute an annual faculty research day.
  - c. Promote a culture of research and creative scholarship that informs and enhances medical education.
  - d. Highlight faculty research in multimedia communications from the College
  - e. Establish a faculty experts directory for the College.
- C. Sponsor and facilitate opportunities for students to engage with members of the research community through interests groups, professional affiliations, and scholarly events.

#### **Strategies**

i. Communicate the benefits of students engaging in mentored research experiences such as the summer research experience, directed research, non-clinical research electives, and

- the Distinction in Research.
- ii. Collaborate with the career counseling office to advise students on research opportunities that may be most appropriate to their long-term goals.
- iii. Provide networking opportunities through student research townhalls and the student research organization.
- iv. Provide workshops on presenting and publishing for student researchers.
- v. Provide and develop main campus and regional academic center networking opportunities for students and medical residents interested in research.
- vi. Create opportunities for students to share research findings at on campus events such as student research town halls, poster sessions and informal research gatherings.
- vii. Recognize student achievement in areas of research.
- viii. Develop and maintain a searchable database of faculty mentored projects for students on the main campus and at all regional academic centers.
- ix. Promote participation and presentation in student friendly scholarly and professional conferences.
- x. Encourage faculty mentors to participate in professional activities with students that facilitate student professional networking and growth.
- xi. Seek extramural partnerships with outside entities that can involve students in research and creative scholarship.
- xii. Provide opportunities for Burrell faculty to present talks on their research to students.

# D. Develop and facilitate collaborations with educational affiliates for research and creative scholarship opportunities

#### Strategies

- i. Involve medical residents in ongoing research projects.
- ii. Develop student research exchange programs that allow Burrell students to participate in research at other institutions and provide research intership opportunities for students at neighboring academic institutions who wish to work under the guidance of Burrell faculty.
- iii. Create opportunities for Burrell to host visiting and international scholars.
- iv. Develop cross-appointment opportunities for research faculty with neighboring institutions.
- v. Develop interprofessional education offerings to include ethical and responsible conduct of research and research focused joint degree/certificate programs.
- vi. Pursue training grants that support students, residents, and postdoctoral fellows who are working on faculty mentored projects.

## E. Promote opportunities that encourage and facilitate the expansion of sponsored research.

#### **Strategies**

- i. Fully operationalize the Research Incentive Program for successful grants.
- ii. Develop and implement a process that provides opportunities for obtaining matching funds for grant submissions.
- iii. Provide professional development in areas of grant-writing and project development.
- iv. Provide opportunities for faculty to receive protected time for Research & Creative

#### Scholarship

- a. Partner with faculty affairs to develop and seek approval for a Research & Creative Scholarship Sabbatical program
- b. Partner with faculty affairs to develop and seek approval for a Research & Creative Scholarship Hiatus program where faculty could devote 100% effort to research for a short block of time.
- v. Incorporate research office staff and research associate support into extramural proposals as allowable by the sponsor.
- vi. Provide opportunities and incentives for research staff professional development.
  - a. Provide periodic webinars and training opportunities for staff.
  - b. Encourage participation in and provide reimbursement of research office staff in professional organizations that offer career development and/or certification pathways.
  - c. Develop and implement an advancement pathway for staff based on levels of job related certification.
- vii. Use professional grant writers for programmatic grants for which the College is uniquely qualified.
- viii. Establish and encourage funding synergies between Burrell Faculty and researchers at other institutions.
- ix. Enhance institutional data tracking, sharing, and information exchange between the Office of Research & Sponsored programs and other offices or entities that relate to business and/or award management related processes.
  - a. Incorporate research office tracking data into centralized College databases.
  - b. Develop and implement research data sharing practices that conform with federal sponsor requirements.